ECONOMIC DEVELOPMENT OF INDIA
BY FIVE-YEAR PLANS

A THESIS

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CHAPTER I

INTRODUCTION

"The most interesting fact about India is that her soil is rich and her people poor."[1]

In India the idea of planning developed when the country suffered from the effects of economic depression. India's First Plan was a kind of preparatory venture for laying down the solid foundations of developmental planning within the parliamentary democratic set-up of the country, thereby initiating planned economic development calculated to improve living standards of the nation by opening out an attractive vista of social and economic possibilities. The Second Plan was a continuing process which emphasized the socialistic pattern of society in the context of developmental planning.

As a result of the first two Plans, Indian economy has responded well to the stimulus of a self-generating growth. India's Third Plan should be large enough to bring about a dynamic economy of a self-generating nature which could leave an investible surplus for an accelerated economic growth.

Problem. —The problem of this study is to analyze the

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[1] M. L. Darling, The Punjab Peasant in Prosperity and Debt ([n. p.], 1925), p. 73.

economic development of India between the years 1950-1962 and the projected development to 1965, the period of India's three Five Year Plans. The study will measure the impact of the achievements of the first two Plans and the targets for the Third Plan on the economic conditions of the nation. It will be concerned only with the economic development of India during this period. It could show how an underdeveloped country can march ahead under democratic planning without losing democratic values in its society.

Definition of Terms. —In this study the meaning of terms used is as follows:

Public sector refers to the sector of the economy which is mainly the concern of government. The Indian Government invests, expands, and manages it.

Private sector is the sector in which private enterprise is guided by the principle of profit.

The Socialistic Pattern of Economy refers to the mixed economy with a specific emphasis to insure more equality of income.

Rupee (Re) is the unlimited legal tender of India. The exchange rate at present is:

Re=$.21
Rs 4.77=$1.00
1 Lakh=100 thousand
1 Crore=10 million
1 Ton=2,400 lbs.

Gramdan is a movement initiated by Acharya Vinoba Bhave in which landholders of a village surrender their individual proprietory rights in favor of the village community.

Bhoodan is a novel way, or rather a Ghandian way, of solving serious aspects of the land problem of the huge class of landless agricultural workers. It means donation of land for the landless, a movement initiated by Acharya Vinoba Bhave.

Saint is a person who retires from society and lives in solitude, especially for religious motives. Rich people usually arrange for his food and clothing.

Schedule Tribes are old tribes of India. The government of India is trying to lift up these tribes by giving special education and training facilities to their members. The tribes which are in these governmental programs are designated as "Schedule Tribes."

Schedule Castes are the untouchable castes of India. Through great efforts by Mahatma Ghandhi this suffering section of the community attained freedom. The Constitution of India abolished "untouchability." Now the government of India has certain special programs for these Schedule Castes.

Procedure. —This study is based on writings of economists, government publications, the reports of the Planning Commission of India, newspapers, publications by the Embassy of India, articles in magazines and elsewhere, theses, and bulletins. Materials have been collected from the Embassy of India in Washington, libraries, and directly from India.

Acknowledgements. —The writer is highly indebted to Dr. Hugo M. Skala, Chairman of the Department of Economics, whose lectures provided the inspiration and basic motivation for this thesis, and whose candid guidance made its completion possible; to Mr. J. B. Blayton, Professor of Business Administration, for reading the thesis and making some valuable suggestions, and to her father-in-law, Mr. P. N. Saxena for his help in furnishing the latest materials from India.

CHAPTER II

PLANNING IN INDIA

Definition and Meaning of Planning

Planning implies centralized control and conscious and deliberate outlay of the national resources with a definite end in view, all the economic aspects being definitely integrated and coordinated so that all duplication and damaging competition may be eliminated.

R. C. Saxena, in his Labor Problems and Social Welfare, quotes W. N. Louck, who defines planning as:

> The shaping of all economic activities into group-defined spheres of action which are nationally mapped out and fitted, as part of a mosaic, into a co-ordinated whole, for the purpose of achieving certain nationally conceived and socially comprehensive goals.[1]

Economic planning replaces the laissez-faire economy with an effective control over the whole economic system of a country so that production, distribution, exchange, and other economic decisions take place according to a plan prepared in advance. Instead of the consumer, the national government becomes the sovereign in economic matters. Instead of self-interest, the social interest guides the economic interest. What is important to planning is that these activities are

[1](5th ed.; Meerut, 1956), p. 679.

effectively controlled by the government. Therefore, planning is possible even under capitalism and planned economy can exist in any form of economy. In the United States the New Deal was a plan of President Roosevelt's government; economic planning in Germany, Five-Year Plans in Russia, etc. all clearly show that by planned economy countries can progress and achieve greater prosperity in a much shorter time than under an unplanned economic system. The backward and underdeveloped countries need planning to secure the development of their resources without any waste. The credit for setting the fashion in economic planning goes to the USSR which made marvellous economic progress through its succesive economic plans.

One most essential thing for planning is sufficient statistical information and collection of facts and figures for drawing up a plan. The planners must have accurate knowledge of the country, its needs, capacity, and bottlenecks before they can draw up a plan. A sound financial and monetary system is also essential for successful planning.

An essential feature of planning is to set definite targets for the various branches of economic life and these have to be obtained within the definite time specified for the completion of the plan.

History of Planning in India

India's plans are designed to lift up Indian economy and the standard of living of the Indian people and to speed the rebirth of India. Planning is not an entirely new idea for the Indians. The credit for first sponsoring the idea of planning goes to Sir M. Visveswarya, who as early as 1934 published his book Planned Economy for India. There followed the "Bombay Plan," the "People Plan," and then the "Ghandhian Plan." In 1946 the government of India set up an advisory Planning Board to review the problems of planning.

Before launching the First Plan in 1951, India's needs were largely those of an underdeveloped country. During the decades in which the Industrial Revolution was taking place in Britain, the military forces of the East India Company were conquering India. For a century and a quarter India had not shaped her own economic destiny, her economy having been an integrated part of the British Empire.

After gaining independence, India was faced with many economic problems. Accordingly, the Planning Commission was appointed in March 1950, with Prime Minister Nehru as its chairman. In July 1951, the first Five-Year Plan was published by this Commission. In 1956, the second Five-Year Plan was published. In June 1960 the Commission published the draft outline of the third Five-Year Plan and, after one year in July 1961, the third Five-Year Plan was published.

Indian planning is a continuous process where each phase of a plan prepares the groundwork for the next and each plan leads into the successive one in order to provide the connecting link for the next.

The first Plan was formulated at a time when the Indian economy was dislocated by World War II. This dislocation was further aggravated by the partition of Pakistan, and on top of this came the Korean War, which generated inflationary pressure on the economy.

India therefore initiated a process of planned economic development in order to raise her living standards by opening to the people new opportunities for a richer and more varied life. If Russia leads the world in totalitarian planning, India furnishes the best example of democratic planning. India is the first democratic country in the world to introduce planning on a comprehensive scale which is as regular and systematic as it is thorough-going.

The First Plan was, in a manner of speaking, a spearhead of attack on India's poverty which was the sum total result of what economic historians call colonial trade. In India the concept of planning is not yet fully developed.

Aim of Planning in India

India wants her rapid and balanced economic development to carry her people forward. The Plans' immediate aims are economic and social--to raise living standards, to increase national income, production, and employment.

In the First Plan, the most immediate need was to relieve the serious food shortage, to curb the rising inflation, and to rehabilitate refugees from Pakistan. In the First Plan it was hoped, therefore, to develop agriculture.

The Second Plan had specifically four objectives:

1. A sizeable 25 per cent increase in national income to raise the still depressed living standards;

2. A rapid industrialization, especially the development of basic industries;

3. A large expansion in employment opportunity; and

4. A reduction of inequalities in income and wealth, and an increasing measure of economic and social justice for all groups.[1]

The Third Plan has been formulated to take into account the experience of the first two Plans and its aims are:

1. To secure a rise in national income of over 5 per cent per annum, the pattern of investment designed to sustain this rate of growth during subsequent plan periods;

2. To achieve self-sufficiency in food grains, and increase agricultural production to meet the requirements of industry and exports;

3. To expand basic industries, like steel, fuel, and power and establish machine-building capacity so that the requirements of further industrialization can be met within a period of ten years or so, mainly from the country's own resources;

4. To utilize to the fullest extent possible the manpower resources of the country and t o ensure a substantial

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[1]Government of India, Planning Commission, Second Five-Year Plan (New Delhi, 1956), p. 24.

expansion in employment opportunities; and

5. To establish progressively greater equality of opportunity and to bring about reduction in disparities in income and wealth and a more even distribution of economic power.[1]

Indian planners did not allow their minds to be hypnotized by such "ism's" as capitalism, socialism, or communism. India's economic salvation was not to be found in any theory. All that they sought was a wide diffusion of economic power and consequent reduction of inequalities. They visualize India's society as a socialistic pattern of society. According to Prime Minister Nehru, it is "A society in which there is social cohesion without classes, equality of opportunity and the possibility for everyone to have a good life."[2] The Government of India follows the key words of the Ghandian economy, "self-sufficiency of the village unit."

Outlay and Investment of Three Plans

The First Plan was essentially a financial one, involving a public investment of Rs. 2,356 crores.[3] The performance of this plan was below expectation, falling short by 15.4 per cent in investment. The Second Plan, drafted in greater

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[1]Embassy of India, India Economic Newsletter (Washington, August, 1961), p. 1.

[2]Government of India, Planning Commission, The New India Through Democracy (New York, 1958), p. 35.

[3]Government of India, Planning Commission, Third Five Year Plan (New Delhi, 1961), p. 56.

detail, involved Rs. 4,800 crores for the public sector and Rs. 2,400 crores for the private sector. The performance of the Second Plan has been more creditable because of improved technique in planning. It was falling short by only 9.6 per cent in investment.

The First Plan may well be characterized as an agricultural plan, whereas the Second Plan may be said to be an industrial plan. The First and Second Plans were to serve as stepping stones to the Third Plan, which must necessarily be much bigger in size and bolder in approach, being a major step forward. Therefore the Third Plan must obviously lay stress on both development of agriculture and expansion of industry, an agro-industrial plan. It is estimated that in the Third Plan public investment will be Rs. 7,500 crores and private investment Rs. 4,100 crores.[1]

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[1] Ibid., p. 380.

CHAPTER III

AGRICULTURAL DEVELOPMENT

Importance, Problems, and Progress of Agriculture

India is a predominantly agricultural country. Agriculture is the main source of livelihood of 70 per cent of the population.[1] Agriculture provides the food grains to feed her large population and raw materials for the various industries. For her imports, India pays by exports of agricultural products. Agriculture contributes about 50 per cent to the total national income of the country.[2] For India as a whole, about 78 per cent of cultivated acreage is in food grains, with only 22 per cent in non-food crops consisting mainly of raw materials for industrial use or exports.[3] Moreover prosperous agriculture means greater purchasing power for farmers with which to buy manufactured goods.

The main food crops are rice, wheat, millets, maize, pulses, gram, barley, sugar cane, tea, coffee, and oil-seed;

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[1]Saxena, op. cit., p. 626.

[2]Planning Commission, The New India: Progress Through Democracy, p. 159.

[3]Ibid., p. 160.

the non-food crops are cotton, jute, tobacco, etc. Tea, oil-seeds, tobacco and spices occupy prominent places in India's exports. Next to China, India is the largest tea producer of the world. She occupies the third position among the cotton-producing countries of the world. Agriculture in India is the very backbone of the economic system.

As population grows and lands are divided by inheritance, the number of small holdings is increasing. The small yield of Indian fields, among the lowest in the world, is both the cause and effect of rural poverty and backwardness. The yield per acre of wheat in the United States is twice that of India, of cotton about four times, and of raw sugar one and a quarter times. The amount of land available to a cultivator is so small that his labor and capital cannot be fully utilized and scientific improved methods of agriculture cannot be adopted. Agriculture in India is carried on as a mode of living rather than for profit. The birth rate is higher in the rural areas than in cities. The land has become crowded with many farmers. According to the law of diminishing returns, there is a great reduction of the productivity of each subsequent man hour spent on the crowded farm. So farmers are producing little and are unable to buy many of the comforts of life with their produce.

In brief, the main agricultural problems which will be discussed in this thesis are: excessive pressure of population on land, defective tenures, inadequacy of irrigation facilities, soil erosion, agricultural finance and marketing, health, sanitation and education of the agricultural masses, and scientific agricultural techniques.

The total output in relation to the total needs is so small that for important commodities like food grains, cotton and jute, India is not self-sufficient; these commodities have to be imported from other countries at a very high price. Costly food imports are draining away the hard-earned foreign exchange needed for import of essential capital goods and raw materials.

Increase in output will bring more income and purchasing power to the cultivator. Technological progress will greatly reduce the pressure of population on land. "Technology dictates that agriculture must go on exporting people to industry."[1] Statistical investigation of the Western world shows that, as people get richer, they do not expand their food consumption by as much as they expand their consumption of industrial products. The proportion of the population of India dependent on agriculture is expected to reduce from 70 per cent to 60 per cent at the end of the Fifth Plan.

The First Plan achieved an actual increase of 22 per cent in food grains production. The First Plan set up a fundamental organization of the rural development program and the national extension service. Rural India's awakening brought a fresh and vital confidence to all Indians. Her

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[1]P. A. Samuelson, Economics (5th ed; New York, 1961), p. 488.

leaders realize that without a swift rise in agricultural production the planning itself cannot succeed.

Agricultural Production

In India the population has been increasing fast, while until recently food production has been more or less stationary. It is a sad reflection on Indian planning that today she is still a food-deficit country. The Second Plan has demonstrated that the weakest point in Indian economy is agriculture.

According to the estimates of increased production, the index of agricultural production, taking 1949-50 as 100, should rise from 135 in 1961 to 176 in 1965-66.[1] The index of food grains was 132 and of other crops 142 in the Second Plan.[2] Yet in the First Plan agricultural production rose by about 17 per cent and in the Second Plan by about 16 per cent; a rise of 30 to 33 per cent is estimated in the Third Plan.[3] (See Table 1.)

The Third Plan provides for an outlay production program in agriculture, including irrigation schemes, soil conservation and cooperation, of about Rs. 1,280 crores as against Rs. 667 crores in the Second Plan.[4]

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[1] Planning Commission, Third Five Year Plan, p. 317.

[2] *Ibid.*, p. 301. [3] *Ibid.*

[4] *Ibid.*, p. 304.

TABLE 1

AGRICULTURAL PRODUCTION IN THE THIRD PLAN*
(Estimated)

Commodity	Unit	Base level production 1960-61	Target of additional production 1961-65	Estimated production 1965-66	% increase
Food grains	Million tons	76.0	24.0	100.0	31.6
Oil-seeds	..	7.1	2.7	9.8	38.0
Sugarcane	..	8.0	2.0	10.0	25.0
Cotton	Million bales	5.1	1.9	7.0	37.2
Jute	..	4.0	2.2	6.2	55.0

*Source: Planning Commission, Third Five Year Plan, p. 317.

The major programs which require intensive work are: (1) irrigation, (2) soil conservation, (3) seed multiplication and distribution, (4) fertilizers and manures, (5) better plows and implements, (6) plant protection, (7) agricultural marketing, and (8) agricultural research and training.

The net irrigated area is expected to increase from about seventy million acres to about ninety million acres at the end of the Third Plan.[1] In the unirrigated area dry-farming practices will be extended to forty million acres, soil conservation measures to an additional total area of fifteen million acres, and food control, drainage and anti-waterlogging measures to five million acres. The additional area

[1]Ibid., p. 307.

under improved seed-food grains is 148 million acres. The consumption of nitrogenous fertilizers will be increased from about 360,000 tons at the end of the Second Plan to 1 million tons in 1965-66. The plant protection area will be 50 million acres at the end of the Third Plan.[1]

Efficient husbandry is an integral part of a sound system of agriculture. The tentative allocation for this program is Rs. 125 crores in the Third Plan as against Rs. 25 crores in the Second Plan.

Land Reform

"Rent is the portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible power of the soil."[2]

On the land there were three classes, the landlord, who did not farming but rented his land to a farmer who, in turn, hired agricultural laborers. So there were landlord, farmer, and agricultural laborers. The farmer was an entrepreneur who employed his capital on the land instead of in a factory.

According to Ricardo "rent never enters the price." Rent evolved historically. When population was small, rent did not exist. As population increased, land of an inferior degree of fertility was put into cultivation and land of superior quality yielded rent. The expenses of the cultiva-

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[1]*Ibid*., p. 306.

[2]David Ricardo, *Principles of Political Economy and Taxation* (London, 1932), p. 44.

tion on the worst land used set the price of produce. Agriculture is an industry in which diminishing returns are the rule.

In India the actual tiller of the soil was not responsible for the payment of land revenue to the Government. Instead there existed a large number of intermediaries between the Government and the actual cultivator. Called zamindars, they were those in whom the British had vested the ownership of the land and who collected land taxes for the British and rents for themselves. Zamindars were responsible for the payment of land revenue to the Government and were recognized as absolute owners of the land. They grew rich because they squeezed profits for themselves at the cost of even subsistence for the tiller. In the First Plan this exploitation and social injustice within the agrarian system was abolished by the Zamindari Abolition Act of 1950. Ownership was taken from the zamindars, who received compensation in government bonds payable in forty years. The act, based on the First Five Year Plan, suggested the following reforms: (1) abolition of the zamindars; (2) tenancy reform, to reduce rents and give tenants an opportunity to acquire permanent rights over the land by payment of fixed compensation, subject to the landlord's right to resume a certain area for his personal cultivation; (3) reorganization of agriculture by consolidation of small holdings, prevention of new fragmentations, and development of cooperative farming and cooperative village management.[1]

The passage of land reform measures in the country has been impressive, but it must be admitted that implementation has been comparatively slow. The abolition of intermediaries has been substantially achieved. The Planning Commission has established a maximum land rent of 1/4 or 1/5 of the gross produce. Yet the work of consolidation of holdings is slow. India needs rapid progress toward the ultimate goal of cooperative farming. According to the United Nations Report on Rural Progress Through Co-operatives, "Co-operative farming ideally fits into the system of re-orientated land tenures in an underdeveloped country determined to achieve economic development through democratic means."[2] By cooperative farming is meant joint management of pooled land and resources.

The Bhoodan and Gramdan movements have greatly helped to create a favorable atmosphere for implementing progressive measures of land reforms.

Community Development Projects

To initiate a transformation of the social and economic life of the villages, the Community Development Project was launched on October 2, 1952. The central object of the CDP is to secure the fullest development of the village area. It

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[1]Planning Commission, The New India, p. 186.

[2]Information Service of India, India Today (Washington, D. C., 1960), p. 8.

is based on the knowledge that no program for the advance of India's villages can succeed without the wholehearted cooperation of the rural people themselves. The workers for this program were trained in Nilakheri.

The total outlay on community development in the first two plans has been about Rs. 240 crores. The Third Plan provides for a total outlay of Rs. 294 crores.[1]

Under this program "blocks" of a hundred villages are taken as a development unit, an area for intensive effort. Under a Block Development Officer are the technical specialists and the funds to bring the villagers both the knowledge and the means to advance in every aspect of their lives, such as education, health, agriculture, animal husbandry, village industry, and housing. Every block makes an intensive coordinated approach to raising the level of rural life as a whole, stressing the building of new schools as much as the introduction of improved seeds, fertilizers, sanitation, building of new roads and wells, and so on.

The Community Development Program now serves over 3,100 development blocks comprising 370,000 villages. Of these, about 880 blocks have completed more than five years and have entered the second five years of community development. By October, 1963, the program will extend over the entire rural area of the country.[2]

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[1]Planning Commission, Third Five-Year Plan, p. 332.

[2]*Ibid.*

Indian cooperative societies. The Survey's recommendations helped to form the Second Plan's programs for cooperative credit societies. One of the first steps taken was the creation of the State Bank of India in July, 1955. The Reserve Bank of India has established a National Agricultural Credit Fund with an initial credit of Rs. 10 crores, plus an additional Rs. 5 crores for each year of the Second Plan.[1]

The Second Plan also recommends linking credit and non-credit cooperatives. To prevent misuse of loans, they must be given in kind-seeds, fertilizers, and, where cash is required, it is to be paid in installments. All cooperative movements are to be developed so that rural families will be included by the end of the Third Plan.

TABLE 2

PROGRESS OF PRIMARY AGRICULTURAL CREDIT SOCIETIES, FIRST AND SECOND PLANS*

Plan	Societies (numbers)	Membership (millions)	Short and medium term loans advanced (Rs. crores)
First 1951-56	159,939	7.8	49.6
Second 1956-61	210,000	17.0	200.0

*Source: Planning Commission, Third Five-Year Plan, p. 204.

[1] *Ibid.*, p. 205.

An eminent rural sociologist of the United States who studied the program points to one of its most significant aspects when he suggests that "India's community development extension program is based on the knowledge that adoption of improved practices by individuals will be more rapid if organized groups assume responsibility for the spread of these activities."[1] Some students who have visited India's rural program have said it is "the most significant experiment in Asia at the present time."[2]

For India, as for other underdeveloped nations, the Community Development Program is not an end product, but an instrument of development placed in the hands of the people. It is a means through which the rural majority can gain new strength, skill, productivity, self-confidence, and the democratic vitality essential to push ahead the nation as a whole.

Cooperative Credit

Cooperation is "self help made effective by organization." The First Plan called the cooperative form of organization "an indispensable instrument of planned economic activity in a democracy."[3]

The All India Rural Credit Survey, issued in 1954 by the Reserve Bank of India, analyzed some of the basic troubles of

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[1] Carl C. Taylor, A Critical Analysis of India's Community Development Program ([n. p.], July 26, 1956).

[2] Planning Commission, The New India, p. 175.

[3] Ibid., p. 203.

The Working Group on the Cooperative Department has set the following targets for the end of the Third Plan:[1]

1. Number of primary village societies . . . 2.5 lakhs
2. Membership . . . . 4 crores
3. (a) Coverage of rural population . . . 55 percent
   (b) Coverage of agricultural population 74 percent
4. Loans to be issued through cooperatives
   (a) Short term Rs. 400 crore s
   (b) Medium and long term (loans outstanding) . . . . Rs. 275 crores

The Third Plan will place the existing marketing societies on a sound basis and, under it, four hundred additional marketing societies will be founded.

Irrigation and Power

Irrigation and power have been among the most siginificant fields of development since the beginning of the First Plan. River valley projects like the Bhakra-Nangul, Hirakud, Darmodar Valley Project, and others have a decisive role in raising the level of economic and social well-being in their respective areas. In India water is even more valuable than land. Irrigation is very important.

India has about 450 million acres of river water usable for irrigation. Of this about 119 million acres had been

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[1] *Ibid.*, p. 164.

utilized by the end of the Second Plan and 41 million acres will be used by the end of the Third Plan.[1]

At the beginning of the First Plan, the total area irrigated from all sources was 51.5 million acres. By the end of the Fifth Plan it is expected that aboutb85 million acres will be irrigated from large and medium projects, including multi-purpose projects.[2] In formulating the proposals for the Third Plan, this long-range objective has been kept in view. A total outlay of Rs. 650 crores, including Rs. 45 crores in foreign exchange, has been proposed for irrigation in the Third Plan.[3]

The unfinished portion of work on the major and medium irrigation projects taken up under the First and Second Plans at an estimated cost of Rs. 1,400 crores will require Rs. 620 crores to complete. Rs. 470 crores have been provided for it in the Third Plan. Rs. 100 crores have been proposed for new schemes in the Third Plan and Rs. 80 crores for food-control, drainage, anti-waterlogging and anti-soil erosion. To secure the maximum benefits in the shortest possible time, emphasis has been laid on the above schemes.

Power development is directly related to industrial development. The total installed capacity in India was 2.3 million KW in 1950-51, 3.4 million KW in 1955-56, and 5.7

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[1]Ibid., p. 380.

[2]Ibid., p. 381.

[3]Ibid.

million KW in 1960-61; this is expected to be about 12.7 million KW in 1965-66.[1] The Plan at present provides for the installation of 300,000 KW nuclear power.

The Third Plan envisages an outlay of Rs. 1,039 on power: Rs. 661 crores for hydro and thermal generating schemes, Rs. 51 crores for atomic power, Rs. 24 crores for uranium mining, fabrication, and for a plutonium extraction plant, and Rs. 327 crores for transmission, distribution, and rural electrification. Investment of Rs. 50 crores is expected in the private sector. The total foreign exchange required for this development in the Third Plan is estimated at Rs. 320 crores.[2]

All this is bound to make a great difference to the prosperity of the country. These projects are the necessary weapons for fighting the poverty that stalks the land. Provision of cheaper power will aid the development of industries, great and small, and of transportation.

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[1] _Ibid._, pp. 36, 56.

[2] _Ibid._, p. 401.

CHAPTER IV

INDUSTRIAL DEVELOPMENT

Large-Scale Industries

India is in the process of industrial development. Quick industrial development is most essential for bringing about the much-needed balance in a developing economy. "Industrial development would be of a great advantage to a country as a whole, creating new sources of wealth, encouraging the accumulation of capital, enlarging the public revenue, providing more profitable employment for labor, and finally developing the national character."[1]

Since the start of the planned industrial development of 1951, a whole series of new industries has been spreading in new areas of the country. The Second Plan was India's first concentrated effort to industrialize.

> A widespread development of factory and non-agricultural industry will absorb an increasing and eventually large proportion of the total population, and is necessary if Indian per capita incomes are to rise.[2]

The index of industrial production, base year 1951 as 100, will be 329 by the end of the Third Plan, as against

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[1]Dewett, _et al._, _op. cit._, p. 181.

[2]George Rosen, _Industrial Change in India_ (Glencoe, 1958), p. 2.

194 in 1960-61, 153 in 1956. The index number of cotton textiles will be 157 in 1966 as against 133 in 1961 and 128 in 1956; iron and steel will be 637 in 1966 from 238 in 1961 and 122 in 1956; machinery of all types will be 1,224 in 1966 from 503 in 1961.[1] The actual increase was, in fact, more pronounced than these figures indicate.

During the First Plan industrial production rose by 39 per cent. In the Second Plan India achieved great industrial progress in basic capital and producer goods industries, especially in the machinery and engineering industries. The production of steel ingots increased to 3.5 million tons as against 1 million tons in 1950. There has been considerable increase in the production of essential industrial material like cement, coal, and aluminum.

The following new centers of industry were established: steel plants in Bhilai, Rourkela and Durgapur; a heavy machinery plant in Ranchi; and a heavy electrical project in Bhopal.

The total investment was estimated at about Rs. 1,244 crores and actual investment was about Rs. 1,620 crores in the Second Plan.[2] The tentative allocation for industrial programs is Rs. 2,455 crores in the Third Plan.[3]

The industrial program for the Third Plan period has to

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[1]Planning Commission, Third Five Year Plan, pp. 39, 64.

[2]Ibid., p. 456.

[3]Ibid., p. 459.

governed by the overriding need to lay the foundation for further rapid industrialization over the next fifteen years if long-term objectives in regard to national income and employment are to be achieved. The role of the public and private sectors are conceived of a supplementary and complementary to one another.

The main areas of development programs in major industries during the Third Plan are iron and steel, industrial fertilizers, Basic Chemicals Intermediates, heavy and light engineering, agricultural machinery and equipment, aluminium, copper, zinc, cement, and consumer goods.

Iron and steel development are linked with the total target capacity of 10.2 million tons in terms of steel ingots and 1.5 million tons of pig iron for sale. Steps are also being taken for the production of about 200,000 tons of alloy, tools and special steel.[1] Total capacity for 76,000 tons of steel casting, 139,000 tons of grey iron casting and about 76,700 tons of steel forgings will be created at the foundry forge.[2]

The production of nitrongenous and phosphatic fertilizers is expected to be respectively 800,000 tons and 400,000 tons during 1961-66.

The program under BCI projects covers the manufacture of forty organic intermediates with an aggregate output of

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[1]India Economic Newsletter (June, 1960), p. 14.

[2]Planning Commission, Third Five Year Plan, p. 472.

of 25,160 tons. The capacity target for cement has been fixed at 15 million tons by 1965-66.

In consumer goods industries the major items for which target of expansion have been proposed are shown on Table 3.

TABLE 3

IMPORTANT PRODUCTION OF CONSUMER GOODS IN THE SECOND AND THIRD PLAN

Commodity	Unit	Annual Production	
		1960-61	1965-66
Aluminum	100 tons	17	75
Cement	..	8,800	13,000
Paper	..	360	820
Sulphuric acid	..	400	1,250
Sugar	..	2,250	3,000
Cotton textiles	million yards	5,000	5,800
Bicycles	100 numbers	1,050	2,000
Sewing machines	..	300	450
Automobiles	..	53	100

Source: India Economic Newsletter (June, 1960), p. 14.

Cottage and Small-Scale Industries

A cottage industry is supplementary occupation of the cultivator and his family. These are handloom weaving, basket making, carpentry, pottery, blacksmithy, gold and silver thread making, ivory carving, etc.

A small-scale industry is operated mainly with hired labor, usually ten to twenty-five hands, and customarily employs mechanized equipment. They generally provide full-time occupation to their workers and are located in urban or suburban areas. Rural small-scale industries include all seasonal factories in rural areas primarily concerned with the processing of agricultural produce, as rice and flour mills, sugar refineries, and others.

Cottage and small-scale industries have a vital role in the Indian economy, particularly under the peculiar conditions existing now. Agriculture, the main occupation of the people, is a seasonal industry, thus providing only partial employment. Many of the large-scale industries, such as sugar and cotton, are also seasonal. The problems of underemployment and unemployment can be suitably solved by encouraging the development of cottage and small-scale industries.

In spite of their valuable role, these industries are facing certain difficulties: (1) inefficient labor; (2) no facilities for cheap credit; (3) absence of organized marketing; (4) lack of machinery and equipment, and so on; (5) competition from imported articles and from large-scale enterprise in India.

In planning, the attitude of the Government to cottage and small-scale industries has undergone a welcome change. The second of the Five Year Plans encouraged such industries to increase the supply of consumer goods and to expand employment in the industrial sector. The objective of the Third Plan in regard to such industries is broadly the same as that of the Second Plan, and also to provide the basis for a progressive and efficient decentralized sector closely integrated with agriculture as well as with large-scale industries.

> One of the principal aims of planning in this field is to assist in the adoption of improved techniques and more efficient forms of organisation, so that full advantage is taken of the basic facilities and services available as a result of general economic development, and over a period the entire sector becomes self-reliant and self-supporting.[1]

In the Third Plan a total outlay of Rs.264 crores has been proposed for cottage and small-scale industries as compared with about Rs. 175 crores in the Second Plan and Rs. 43 crores in the First Plan.[2]

Between 1950 and 1961 the production of handloom cloth increased from about 742 million to about 2,125 million yards, khadi from over 7 million yards to about 80 million yards, and raw silk from about 2 million pounds to about 3.7 million pounds. Production of cloth, handloomed and power-loomed and khadi, is proposed to increase to 3,500 million yards and raw silk to about 5 million pounds by the end of the Third Plan.[3]

The amount of production of such small-scale industries as building, hardware, handtools, sewing machines, electric fans, and bicycle also registered sizeable increases. Small Industries Service Institutes have been set up in all states.

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[1] *Ibid.*, p. 426.

[2] *Ibid.*, pp. 33, 437.

[3] *Ibid.*, pp. 36, 54.

In addition, forty-two extension centers have been established in association with these industries. About sixty Industrial Estates, comprising seven hundred small factories had been set up by the end of the Second Plan. The number of Industrial Estates will be 360 by the end of the Third Plan.[1]

It is estimated that the development program for cottage and small industries will provide part time or fuller employment for about eight million persons and whole time employment for about 900,000 persons.[2]

Minerals

Minerals are the foundation of industrial progress, for they provide the raw materials for heavy industries.

Indian mineral resources have not yet been fully assessed. The country is fairly well endowed with most of the essential minerals. In the past few years there has been a general increase in the volume and value of mineral production, with the mineral output now Rs. 159 crores as against Rs. 83 crores in 1950.[3]

Coal. _ Coal is the principal source of power and of heat. It is India's leading mineral both in value and quantity of output. In 1959 the output was 47.82 million tons as compared with 34.43 million tons in 1951. As against a target of 60 million tons in the Second Plan, the production was only

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[1] Ibid., p. 449.

[2] Ibid., p. 450.

[3] Ibid., p. 515.

54.62 million tons.[1] Now the Third Plan is expecting about 97 million tons.

Oil.— There is at present no production of oil within the country except for a small quantity obtained from the area in Assam. This meets only 7 per cent of the domestic requirements. Recently three refineries have been set up to process imported crude oil.

The exploration and development of the country's oil resources is one of the important tasks of the Second and Third Plans. An Oil and Natural Gas Commission has been set up to intensify the work of exploratory drilling for oil. In the Third Plan the Commission will operate on a larger scale with a view of proving oil reserves and establishing additional production. A provision of Rs. 115 crores has been made in the Third Plan for this purpose as against Rs. 26 crores in the Second Plan.[2] By the end of the Third Plan indigenous production of crude oil is likely to reach a level of 6.5 million tons, and the total production would be approximately 18 million tons during the Third Plan.[3]

Iron Ore.— The requirements of iron ore for the steel and pig-iron target under consideration are estimated at about 20 million tons. The total requirements for export would be about 10 million tons. To meet these requirements, the target has been placed at 32 million tons.[4] Production of iron ore

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[1]Ibid., p. 511.

[2]Ibid., p. 514.

[3]Ibid., p. 529.

[4]Ibid., p. 56.

increased from 2.97 million tons in 1950 to about 10.5 million tons in 1960.[1]

It is planned to expand both the Indian Bureau of Mines and the Geological Survey of India in the Third Plan. The most important items in these programs are coal, iron ore, manganese ore, chromite, bauxite, limestone, copper, lead, zinc, and magnesite.

Transport and Communications

The rapid developemnt of the economy during the past decade has placed demands on transportation and communications. Lack of these facilities may prove to be a bottleneck in the entire Idian economic development.

Rehabilitation of the railways, which had suffered much damage from the War and from the partition of Pakistan, was the main objective during the First Plan. In this plan the total actual expenditure for transport and communications was Rs. 522.8 crores; in the Second Plan, the provision was for Rs. 1385.1 crores, but the estimated expenditure was Rs. 1299.8 crores.[2] In the Third Plan Rs. 1486 crores were to be distributed between the various programs in transport and communications, as shown in Table 4.

During the Second Plan the railways have undertaken extensive development in association with the building up of basic industries like steel, coal and cement. From 91 million

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[1] *Ibid.*, p. 36.

[2] *Ibid.*, p. 536.

TABLE 4

PROVISIONS FOR TRANSPORT AND COMMUNICATIONS PROGRAMS IN THE THIRD PLAN

Program	Rs. crores Provision
Railways	890
Road and road transport	297
Shipping, inland water transport, ports and light-houses	153
Civil air transport	55
Posts and telegraph	68
Tourism	8
Broadcasting	7
Other transport and communications	8
Total	1486

Source: Planning Commission, _Third Five Year Plan_, pp. 541-42.

tons in 1950-51, the total freight traffic on the railways increased at the end of the Second Plan to 162 million tons, the number of locomotives increased from 8,200 to 10,600, coaches from 19,200 to 28,900, wagons from 199,000 to 354,000, and 1,200 miles of new railway lines were added, 1,300 miles of track doubled, and 880 miles of track electrified.[1] By the end of the Third Plan freight traffic is expected to increase 235 tons and the construction of 1,200 miles of new railway lines is anticipated.[2]

[1] _India Economic Newsletter_ (July, 1960), p. 5.

[2] _Ibid._, p. 15.

Road development has also shown appreciable progress. Mileage of surfaced roads increased from 123,000 miles in 1950-51 to 144,000 miles in 1960-61, and unsurfaced roads from 208,000 to 250,000. Under the Plan, the total mileage proposed to be reached by 1981 is 252,000 miles for surfaced roads and 405,000 for unsurfaced roads.[1]

Expansion of road transport will be mainly in the private sector with the number of commercial vehicles roughly estimated to rise to about 365,000 during the Third Plan as against 200,000 in the Second Plan and 116,000 in the First Plan.[2]

The tonnage of Indian shipping is estimated to rise to about 1.1 million GRT during the Third Plan as against 905,000 GRT in the Second Plan and 480,000 in the First Plan.[3]

The capacity of civil air transport has increased considerably since 1953, when the air services were nationalized.

Tourism has assumed increasing importance during recent years. The number of foreign tourists visiting India is estimated to have risen to about 123,000 in 1960 as against 20,000 in 1951. The earnings of foreign exchange from tourism are estimated to have increased from about Rs. 4 crores in 1950 to about Rs. 20 crores in 1961.[4]

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[1]Planning Commission, _Third Five Year Plan_, pp. 549-550.

[2]_Ibid_., p. 554. [3]_Ibid_., pp. 556-557.

[4]_Ibid_., p. 565.

In the first two Plans the number of postal articles handled in the country increased by about 80 per cent, the number of telegrams by about 43 per cent, the number of long distance calls almost fivefold. The number of post offices rose from 36,000 to 77,000, of telegraph offices from 3,600 to 6,450, and of telephone connections from 168,000 to 460,000.[1] A provision of Rs. 1.4 crores has been made in the Third Plan for a factory for the manufacture of teleprinters, which started with the production of about 170 units in 1961. Other notable advances have been made in the development of the telephone industry.

Considerable progress has also been achieved in broadcasting. During the First Plan each language area was provided with at least one transmitting station, bringing the number of stations to 28. The number of radio licenses increased from .55 million in 1950 to 1.88 million in 1959. A television center has been established at Bombay and a small education television unit at Delhi.[2]

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[1] Ibid., p. 567.

[2] Ibid., pp. 571-572.

CHAPTER V

SOCIAL SERVICES

The value of social services as an incentive and indeed as a necessary condition for economic advance is well recognized. The total allocation in the public sector under this head in the Third Plan is Rs. 1250 crores as against Rs. 860 crores in the Second Plan and Rs. 459 crores in the First Plan.[1]

Education

Education is the most important factor in achieving rapid economic development and technological progress. Through it are developed skill, knowledge, and a creative attack to a nation's problems.

This has been recognized by the Indian Government. Consequently the outlay on educational programs contemplated for the Third Plan is Rs. 500 crores as compared to Rs. 273 crores in the Second Plan. This includes Rs. 370 crores for general education and Rs. 130 crores for technical education. About Rs. 209 crores will be allocated for elementary education,

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[1]India Economic Newsletter (June, 1960), p. 10.

Rs. 88 crores for secondary education, Rs. 82 crores for university education, and Rs. 29 crores for other educational programs in the Third Plan.[1] In the field of elementary education, facilities will be provided during the period of the Plan for free and compulsory education for the entire age-group six to eleven. It is foreseen that the proportion of girl students in this group will increase.

In the first two Plans the number of students increased from 23.5 million to 43.5 million. The increase in the age-group six to eleven was 79 per cent; in that of eleven to fourteen, 102 per cent, and in the fourteen to seventeen group, 139 per cent. Under the Third Plan, the total number of students is expected to increase by 20.4 million--15.3 million in the six to eleven age-group, 3.5 million in the eleven to fourteen age-group, and 1.6 million in the fourteen to seventeen age-group.[2] It has been decided to model all elementary schools on one basic pattern. There will be considerably more emphasis on training teachers in basic methods. By the end of the Third Plan it is contemplated that at least 80 per cent of the teachers will have received this basic training.

At the secondary school level it is thought that the proportion of students will increase from the present 12 per

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[1] Planning Commission, <u>Third Five Year Plan</u>, p. 574.

[2] <u>Ibid</u>.

cent to about 15 per cent by the end of the Third Plan. An important object of the reorganization is to impart a vocational and practical basis to secondary education.

Programs for university education include allotments for larger facilities for teaching of science, for raising the scale of pay for teachers, and for improvement of laboratories and libraries, of post-graduate studies and research scholarships and loans.

Development of educational institutions will play a vital role in bringing about national integration and social cohesion among the younger generation.

Health

The broad objective of the health programs in the Third Plan is to expand health services in order to bring about progressive improvement in the health of the people by ensuring a certain minimum of physical well-being and by creating conditions favorable to greater efficiency and productivity.

The tentative provision for the health program in the Third Plan has been placed at Rs. 315.8 crores as against Rs. 223.0 crores and 139.3 crores respectively for the Second and First Plans. (See Table 5.)

Statistics show that in 1961 there was a birth-rate of about 40.7, a death-rate of 21.6, an infant mortality rate of 142.3 for males and 127.9 for females, and an expectation of life at birth of 41.68 for males and of 42.06 for female children.[1] The average expectation for life was 32.45 years for women and 31.66 years for men in 1951.[2]

TABLE 5

DISTRIBUTION OF OUTLAY IN THE HEALTH PROGRAMS

Program	First Plan	Second Plan	Third Plan
Water supply and sanitation	49.0	76.0	105.3
Primary health units, hospitals and dispensaries	25.0	36.0	61.7
Control of communicable disease	23.1	64.0	70.5
Education, training, and research	21.6	36.0	56.3
Indigenous system of medicine	.4	4.0	9.8
Other schemes	20.2	6.0	11.2
Total	139.3	223.0	315.8

Source: *Ibid*., p. 651.

In order to develop public health services, especially health education, the program includes the establishment of field training and demonstration centers, the setting up of health education bureaus and social education units, organization of health education units and training of specialists. Training facilities for health personnel, including nurses and midwives, will be considerably extended.

In the plans for improvement of health conditions, better nutrition also holds a crucial place.

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[1] *Ibid*., p. 652.

[2] Dewett, *et al*., *op. cit*., p. 16.

Housing

Good housing for India's vast and growing population poses a task of enormous dimensions. The housing problem becomes more acute day by day with the growth of population. The poorest class of people either have no dwellings at all or live in slums amidst disgraceful, unsanitary conditions.

For housing and urban development programs, the Third Plan provides Rs. 142 crores as against Rs. 84 crores in the Second Plan. The main targets for the Third Plan are for subsidized industral housing, 73,000 units; low income-group housing, 75,000; slum clearance, 100,000; village housing, 125,000. There are also provisions for plantation labor housing and for land acquisition and development.[1]

Improvement of housing conditions has a manifold significance. It raises the level of living, provides greater opportunities for work and is a vital element in the transformation of rural life.

The housing programs of the Third Plan will be the foundation for larger developments in the future. The present position of housing statistics is unsatisfactory in relation to the needs of planning.

Development of Backward Classes

The Third Plan provides about Rs. 114 crores for devel-

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[1]*Ibid.*, p. 681.

opment of backward classes as against Rs. 79 crores and Rs. 30 crores in the Second and First Plans respectively.[1]

This program is to bring Scheduled Tribes, Scheduled Castes, and other backward classes to the level of the rest of the community.

Rehabilitation of Displaced Persons

After the partition of Pakistan about 8.9 million persons migrated from Pakistan into India. About Rs.238.74 crores were spent on their rehabilitation since 1947 and during the first two Plans. During the Third Plan this program will relate mainly to displaced persons from East Pakistan. In the Third Plan about Rs. 25 crores will be provided for the requirements of the rehabilitation program.

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[1] *Ibid.*, p. 701.

CHAPTER VI

THE POPULATION PROBLEM OF INDIA

The rapid growth of population in India has been nullifying whatever little improvement in production has been achieved. The existence of the food problem is a very convincing evidence of the lag between population and production.

Malthus realized that prosperity does not depend upon population, but population depends upon prosperity. Next to China India has the largest population in the world, but the goods and services which are available to the average European are eleven times greater than those available to the average Indian. The standard of living in India is very low.

Malthus believed that there is a direct positive relation between the standard of living and the growth of population. The conclusions drawn by Malthus out of the study of population are the following:

1. The growth of population is necessarily limited by the means of subsistence.

2. The population in a country tends to increase much faster than the food supply. Population, when unchecked, increases in geometrical progression while the food supply

increases only in arithmetical progression.

3. Population tends to double itself in every twenty-five years.

4. The tendency of population to increase so rapidly is counteracted by positive and preventive checks.[1]

Malthus tried to establish a relationship between population and food supply rather than between population and the total production of all types in a particular country. The growth of population is not always necessarily an evil. Every child that comes into this world comes with a mouth and a pair of hands. Increase in population is often welcome as it adds strength to man in his persistent fight against nature. The optimum point is that which enables the community to produce the largest amount of goods and services per head.

Too much interest in the problem of population has been created by the scarcity of food and the low living standard. The question as to whether India is overpopulated has been highly controversial. The pressure of population on land, the widespread food shortage in the country, low consumption, low per capita income, high rate of increase of population, and the increasing volume of unemployment are evidences that India is overpopulated. The population problem of India, on the other hand, is not in the excess of population, but in

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[1]T. R. Malthus, An Essay on Population, I (London, 1952), 1-11.

the inefficiency of production and inequitability of income distribution. The economic structure does not permit full and proper utilization of her resources.

Samuelson states the case in general terms:

> Indeed, as writers since Malthus have warned, unbridled increase in numbers is likely to invoke the law of diminishing returns and to work against increases in per capita living standards. Admittedly, we do find many underdeveloped countries repeating the pattern of the eighteenth and nineteenth century developing economies: improved medical technology first reduces the death rate; and, birth rates remaining high, population grows rapidly.[1]

This is true in India.

Family Planning

To attack this problem, a key position has been given to family planning under the Third Plan. The program will place emphasis on the following aspects: (1) widespread education to create the necessary social background for a family planning program; (2) integration of family planning activities with the normal health services; (3) provision of family planning services, including facilities for sterilization and distribution of contraceptives; (4) development of training programs; and (5) utilization of local voluntary leadership for the campaign. The tentative provision for the family planning program in the Third Plan is Rs. 27 crores as against Rs. 3 crores in the Second Plan.

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[1] *Op. cit.*, pp. 782-783.

India needs to control the size of her population through proper regulations if the standard of living is to be raised. As the struggle for existence becomes harder and harder day by day, the size of the family should be limited at least to the extent that the children can be assured of the same standard of living as that enjoyed by the parents. This end can be attained in India by the following means: moral restraint, contraceptives, eugenics, education, the economic emancipation of women, and legislation.

Employment

R. C. Saxena notes that "Pigou has observed that a man is only unemployed when he is both not employed and also desires to be employed."[1] Thus unemployment in a country can be defined as a state of affairs when there is a large number of able-bodied persons of working age who are willing to work but cannot find work at the current wage levels. Children, the sick and the disabled may be called unemployable, while beggars, saints and the like may be called parasites.

According to classical economists unemployment cannot exist under conditions of full equilibrium if there is free competition. J. M. Keynes, however, rejects this position of the classical economists and has his own theory of employment. He stated that those who are partially employed or are holding jobs inferior to those they are qualified for are not adequate-

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[1] Op. cit., p. 711.

ly employed. This is called underemployment, which is equally as bad for a country's prosperity as partial unemployment.

In general, according to Keynes, the volume of employment depends upon the effective demand; the volume of effective demand is determined by the rate of investment and the propensity to consume; the rate of investment depends upon the rate of interest and the marginal efficiency of capital; and the rate of interest is determined by the quantity of money and the state of liquidity preference. Keynes introduced the concept "investment multiplier" to explain investment and employment. Investment multiplier is the ratio between the increase in gross investment and the resulting increase in total national income. If the gross investment of industries is increased, the income of the country will not only rise to the extent of the increase in the investment, but will rise much more. According to Keynes, the root of unemployment is oversaving and undersaving, which are caused by maldistribution of income.

In the case of a country like India, the evil of unemployment is almost intolerable. With India's wealth in unexploited mineral, agricultural and power resources, any unemployment means a loss of potential national wealth. There is unemployment in India at four levels, among the educated, the industrial, the agricultural, and the unskilled workers. The main cause of all types of unemployment is India's economic backwardness.

The Planning Commission considers the following as the main factors responsible for unemployment: rapid growth of population, disappearance of old rural industries, inadequate development of industries, inadequate development of the non-agricultural sector, the large displacement of population as a result of the partition of Pakistan, and an inefficient educational system. Since the Indian educational system is for the most part not technical, it creates a surplus of clerks and teachers.

The result is that there is an army of unemployed in India. As a matter of fact, no accurate statistics as to the extent of unemployment are available.

In the First Plan the Planning Commission stated that the problem in India was more one of underemployment than unemployment and announced an eleven-point program to relieve the situation: (1) assistance for establishing small-scale industries; (2) creation of training facilities in those lines in which there was a shortage of manpower; (3) purchases by state and local authorities from small and cottage industries to encourage them; (4) opening of adult education centers in urban areas; (5) immediate establishment of a National Extension Service; (6) development of roads and transport; (7) slum clearance and development of low cost housing; (8) encouragement of schemes for development of power sponsored by private capital; (10) planned assistance to displaced townships; (11) establishment of work and training camps.[1]

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[1]Planning Commission, Second Five Year Plan, p. 115.

Assessing the results of the First Plan, the Planning Commission itself says that

> Employment opportunities have not been increasing pari passu with the increase in the labor force. The increase in investment in the First Plan has not been on a scale sufficient to absorb the new entrants to the labor market and underemployment to be made good.[1]

In the course of the Second Plan, the target of additional employment opportunities was 8 million outside agriculture as against 4.5 million in the First Plan. The Second Plan hoped to create in all more jobs than proved possible, for the increase was only 6.5 million. The Third Plan has as its goal an additional 10.5 million in non-agricultural employment and 3.5 million in agricultural employment.[2]

There is also the problem that full employment is not possible in India under present conditions. The Planning Commission pointed out in the First Plan that India, as an underdeveloped country, could not expect to attain the goal set for its economic activity.

Full employment does not mean that everybody must work to the full limit of his capacity, but merely that each person should be employed as advantageously as possible. R. C. Saxena quotes Sir William Beveridge as saying that full employment always has more vacant jobs than men.[3] According to Pigou, full employment means that all able-bodied people are

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[1]*Ibid.*, p. 123.

[2]Planning Commission, *Third Five Year Plan*, pp. 156, 159.

[3]*Op. cit.*, p. 727.

employed if they desire to work at the prevailing rate of wages.[1]

[1] *Ibid*.

CHAPTER VII

MONETARY DEVELOPMENT

Financing of the Plans

India, as an underdevloped nation, requires two kinds of money for financing her Plans. First, she requires her own currency for expenditures inside the country, rupees which must be raised within India by taxes, bonds, small savings, and deficit financing. Development further requires foreign exchange, chiefly dollars and pounds sterling to buy essential development goods abroad. Foreign exchange is raised by selling Indian exports abroad or by foreign capital's coming into India as loans, grants, or private investment.

In the Second Plan the amount of foreign exchange needed was very high because heavy machinery and other equipment had to be imported in order to develop industries rapidly.

The sum of Rs. 7500 crores required for the development programs in the Third Plan in the public sector is to be raised as shown in Table 6.

The scope for deficit financing in the Third Plan is very limited. Increase in the money supply through the budget as well as credit creation by the banking system have to be viewed together in this context. Money supply could increase

TABLE 6

FINANCIAL RESOURCES OF THE SECOND AND THIRD PLANS

Item	Rs. crores	
	Second Plan	Third Plan
Balance from current revenues excluding additional taxation	-50	550
Contribution of railways	150	100
Surplus of other public enterprise	—	450
Loans from the public	780	800
Small savings	400	600
Provident funds	170	265
Steel Equalization Fund	38	105
Balance of miscellaneous capital Receipts over non-Plan disbursements	22	170
Additional taxation including measures to increase the surplus of public enterprise	1052	1710
Budget receipts corresponding to external assistance	1090	2200
Deficit financing	948	550
Total	4600	7500

Source: Planning Commission, Third Five Year Plan, p. 95.

by about 33 per cent in the period of the Third Plan without causing excessive pressure on prices. A great deal depends on how far production increases, especially in agriculture, and how effectively inflationary trends are held in check.

Taxation is an important element in any development plan. The proportion of tax revenues to national income was about 8.9 per cent in the Second Plan, and it will go up to 11.4 per cent during the Third Plan. The Third Plan will involve a substantial increase in both direct and indirect taxation. The Planning Commission has said:

> There is no escape from the fact, that in a country like India where the bulk of the people are poor, resources on an adequate scale cannot be raised without calling for a measure of sacrifice from all classes of the people.[1]

The deficit in the balance of payment during the First Plan was Rs. 318 crores, of which Rs. 196 crores was financed by external credit and Rs. 122 crores by a draft on foreign exchange reserves;[2] in the Second Plan Rs.927 crores of the deficit was financed by external assistance and Rs. 598 crores from foreign exchange reserves. In the Third Plan the external assistance is expected to be about Rs. 2600 crores.

The following table sets out the probable level of investment in the private sector during the Second and Third Plans.

TABLE 7

INVESTMENT IN THE PRIVATE SECTOR

Group	Rs. Crores	
	Second Plan*	Third Plan
Agriculture	675	850
Power	40	50
Transport	135	250
Cottage and small-scale industries	225	325
Minerals and large-scale industries	725	1100
Housing and other construction	1000	1125
Inventories	500	600
Total	3300	4300

*Revised estimates.
Source: Planning Commission, Third Five Year Plan, p. 105.

[1] Third Five Year Plan, p. 104. [2] Ibid., p. 108.

The total investment envisaged in the Third Plan is reckoned at Rs. 12400 crores and its direct foreign exchange requirements are estimated at Rs. 2030 crores, as follows:

TABLE 8

INVESTMENT AND FOREIGN EXCHANGE REQUIREMENT IN THE THIRD PLAN

Head	Rs. crores	
	Total Investment	Foreign Exchange
A. Public Sector.		
Agriculture and commodity development	610	30
Major and medium irrigation	650	50
Power	1012	320
Cottage and small-scale industries	100	20
Minerals and large-scale industries	1470	690
Transport and communications	1486	320
Social services	572	90
Inventories	200	—
Total	6100	1520
B. Private Sector.		
Transport, minerals and large-scale industries	1350	495
Cottage and small-scale industries	325	15
Others	2625	Neg.
Total	4300	510
Grand Total	12400	2030

Source: Planning Commission, <u>Third Five Year Plan</u>, p. 110.

Foreign Trade

With the growth of industrial production and the development of the economy as a whole, the level of import has risen substantially during the last decade. During the First Plan the total imports amounted to Rs. 3620 crores; they were estimated in the Second Plan at Rs. 5360 crores and for the Third Plan at Rs. 5750 crores.

The total exports were Rs. 3043 crores in the First Plan and Rs. 3069 crores in the Second Plan. In the Second Plan agricultural production exports did not improve, but slight increases were achieved in exports of new manufactures and product of iron ore. The objective of achieving a total export earning of Rs. 3700-3800 crores during the Third Plan has been set. Table 9 shows the changes in the direction of India's foreign trade during the first two Plans.

For developing the export effort, it is essential that a considerable part of India's industry becomes much more competitive than it now is. It is also essential to try to increase invisible earning, especially through tourism and shipping, and to facilitate foreign private investment.

The Planning Commission has noted that

> As India's economic progress increases and she is able to offer and to receive more, she becomes part of an ever expanding world economy, in which growing cultural and economic relations enrich the life and strengthen the economies of all nations.[1]

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[1] Ibid., p. 138.

TABLE 9

DIRECTION OF INDIA'S FOREIGN TRADE

Country/Area	Per cent share					
	Exports			Imports		
	1952	1956	1960	1952	1956	1960
ECAFE countries	25.7	16.3	17.0	13.6	12.4	13.1
Japan	4.1	4.9	5.5	2.4	5.2	5.4
West Asia	5.7	5.8	6.5	7.7	10.8	7.5
Africa	3.9	3.9	2.5	3.8	4.0	4.4
Western Europe	29.6	39.8	38.5	30.1	50.1	40.4
United Kingdom	20.5	29.8	27.5	18.5	25.0	20.0
European Economic Community	7.5	8.3	8.0	8.8	20.0	18.0
Eastern Europe	1.3	3.5	8.0	2.2	4.2	3.7
North America	21.1	17.0	18.7	37.3	12.4	25.2
United States	19.0	14.7	16.0	33.6	11.3	23.7
Latin America	1.4	1.0	2.5	—	0.1	0.1
Oceania	4.3	4.4	3.1	2.0	1.7	2.3
Others	7.3	8.3	3.2	3.3	4.3	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Planning Commission, Third Five Year Plan, p. 136.

Prices

In India prices fluctuated widely in the First Plan and they have shown a rise trend through the Second Plan. (See Table 10.) The continued uptrend in wholesale prices in the Second Plan was due to the rising pressure of demand resulting from the growth of population and of money income.

The all-India working class cost of living, base 1949 as 100, was 103 in March 1951 and 124 by the end of the Second Plan. The rise in the index was chiefly due to the increase in the price of food grains. Further, the upward trend of

TABLE 10

INDEX NUMBER OF WHOLESALE PRICES, 1950-61

Base: 1952-53=100

Commodity	1950	1956	1961	Percentage rise in 1961 as compared to 1956
Food articles	108.3	92.8	117.6	+26.7
Industrial raw materials	119.1	109.4	159.1	+45.4
Manufactures	98.9	102.9	129.4	+25.7
All commodities	106.4	98.1	127.5	+30.0

Source: Planning Commission, Third Five Year Plan, pp. 120, 122.

of world prices was also reflected in India prices.

The level of wholesale prices and cost of living are already high and it is essential to ensure that there is no acceleration of inflationary pressures in the course of the Third Plan and that the level of the cost of living of the more vulnerable classes in the society is safeguarded. It will be necessary to keep a close watch on prices. Stable and reasonable prices for what the farmer produces are likely to provide him a better incentive than high but fluctuating and uncertain prices. Prices of exportable commodities will tend to rise for the domestic consumer because the Third Plan calls for the fullest effort to raise export. The Third Plan has been formulated with due regard to the need for minimizing inflationary pressure and for keeping a balance between the growth of essential demands and the availability of supplies to meet them.

A major constituent of price policy is fiscal and monetary discipline. Fiscal policy in all its aspects must aim at restraining consumption and mobilizing saving more effectively. Monetary policy has to go hand in hand with fiscal policy. The latter has to avoid the creation of excess purchasing power through government operation and the former has to regulate the pace of credit creation through banks.

The Indian Government has power to control the prices of steel, cement, raw cotton, sugar and coal.

National Income

National income has been defined as implying "aggregate amounts of purchasing power earned and consumed by the people of a particular nation in the course of a given period of time, usually a year.[1] The product method and the income method are commonly employed for the measurement of national income of any nation.

> By means of statistics of national income, we can chart the movement of a country from depression to prosperity, its steady long term rate of economic growth and development, and finally, its material standard of living in comparison with other nations.[2]

The estimation of the national income in India is a very

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[1]M. B. Killough, et al., International Economics (New York, 1960), p. 157.

[2]Dewett, et al., op. cit., p. 415.

difficult task. The most serious handicap is the inadequacy, non-availability and unreliability of the statistics.

TABLE 11

NATIONAL INCOME, PER CAPITA INCOME, POPULATION AND CONSUMPTION LEVEL OF FOOD AND CLOTH 1951-1966 AT 1960-61 PRICES

Unit	1950-51	1955-56	1960-61	1965-66
National income Rs. crores	10,240	12,130	14,500	19,000
Per capita income Rs.	238	306	330	385
Population million	361	397	438	492
Food: calories per capita per day	1,800	1,950	2,100	2,300
Cloth: yards per capita per annum	9.2	15.2	15.5	17.5

Source: Planning Commission, Third Five Year Plan, pp. 22, 35-36, 56, 76.

During the First Plan, national income increased by about 17.5 per cent as against the Plan target of 11 per cent. In the Second Plan, national income increased about 20 per cent as against the original target of 25 per cent increase. The Third Plan expects that national income will increase by 25 per cent during the entire period. The per capita income during the First Plan recorded an increase of 10.5 per cent, during the Second Plan of 18 per cent, while it is estimated that it will increase about 17 per cent in the Third Plan.

The rate of investment was 7 per cent at the end of the

First Plan and around 11 per cent at the end of the Second Plan. The Third Plan aims at raising the level of investment about 14 per cent by 1965-66. The rate of domestic saving at present is around 8 per cent of the national income. This has to be raised to about 11 per cent by the end of the Third Plan, the balance representing inflow of resources from a-broad.

Since the death rate in India is falling, the rate of population increase has become larger independent of a rise in the birth rate. The population is now increasing at the rate of 2.1 per cent per annum, a terrific rate of increase. Yet the average life expectancy in India is the lowest of all the civilized countries in the world.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

This study has analyzed the economic conditions in India under her three Plans for development. After the country gained independence in 1947, it was realized that Indian economy had suffered under British rule, many of the deficiencies in the economic structure coming through World War II and the partition of Pakistan. The problems, then, of India today arose during British rule as a direct result of British policy.

The pressure from English industrialists who wanted to have a market in India for their manufactured articles, changed India to an exporter of raw materials. Indian handmade goods could not compete with the cheap machine-made goods of Britain. Since the illiterate Indian artisans failed to adapt themselves to changing conditions, agriculture became the sole means of livelihood for a large majority of the population.

Thus, with independence, there was obviously a need for a comprehensive outlook in reorganizing the country's economic life. Prime Minister Nehru said that "the poverty of centuries could be eradicated only by hard work in a planned way on the basis of socialist principles."[1]

A long-range approach to planning has been undertaken in the development of Indian economy. A twenty-five year period, divided into five Plans, each of five years, has been chosen in recognition of the fact that progress through planning is a continuing process. These Plans are designed to bring about a n increase in production and a more equitable distribution of goods. In spite of the present economic picture in India, it must be realized that in natural resources and water power resources she is one of the richest countries in the world. Nehru has said that "India is rich in natural resources and its people can be rich by harnessing this hidden wealth of the nation and by applying science in the field of agriculture and industry."[2] The people of India have boldly tackled this task, firmly determined to overcome all difficulties and obstacles standing in the way of their country's economic progress.

India did not choose to copy Russia, Japan, China, Germany and others in rapid industrialization. Taught patience and non-violence by Ghandhi, Indians are extremely idealistic, believing in "simple living and high thinking." The Indian viewpoint is illustrated by contrasting two definitions of economics quoted by an Indian writer, S. S. Rathi, one that of the famous economist, Robbins, the other that of an Indian

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[1]Embassy of India, Indiagram (Washington, D. C., February 16, 1962), p. 2.

[2]*Ibid.*, p. 5.

economist, J. K. Mehta. Robbins says, "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses." Mehta, on the other hand, defines economics as being "concerned not with want satisfaction but rather with want elimination, with a view to reaching a state of wantlessness or Nirvan."[1]

Indian economics is not philosophy divorced from economics, but economics wedded to philosophy. Therefore the development of a brighter future through long-range planning has more chance of success in India than elsewhere, for Indians are prepared by their philosophy to wait.

According to Samuelson, "An underdeveloped nation is simply one with real per capita income that is low relative to the present-day per capita incomes of such nations as Canada, the United States and Western Europe generally."[2] Annual per capita income in the United States is $2,500 compared to $74 (or Rs. 330) in India. The use of the word "real" is, however, not accurate in comparing these two figures. We should realize that the purchasing power of the rupee in India is equal to that of the dollar in the United States. Thus Rs. 330 are equivalent not to $74, but rather to $330. Farmers, who make up 70 per cent of the population of India, but they pay no rent for the small hut or house made of mud

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[1]S. S. Rathi, *et al.*, *The Principles of Economics* (rev. ed.; Agra, 1958), pp. 11, 24.

[2]*Op. cit.*, p. 776.

by their own hands and depend upon their own farms for food grains and vegetables. They also keep a cow, which provides them with milk and butter. In some villages the barter system still exists. Usually illiterate and ignorant, the farmers hoard gold and silver since they do not trust the banking system. Thus those who think that the standard of living in India is the lowest in the world are to some degree wrong. Slums exist everywhere in the world. India is indeed a poor country, but not as poor as it appears from these figures.

Samuelson says, "The advanced nations once faced the same problems and gradually, step by step, they somehow succeeded in achieving development."[1]

The Indians face the gigantic task of transforming their whole structure of living to meet their own needs, discarding harmful British policies and attitudes, while retaining those which can be helpful and integrating them more fully into the Indian way of life.

Indian leaders have made six significant decisions in relation to planning the whole course of the country's future development:

1. India will mobilize her resources and energies.

2. She will first develop her agriculture and raise the standard of living of her rural people.

3. She will develop her industries, but with a careful

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[1] Ibid., p. 795.

balancing of large and small industry, of the heavy industries basic to economic growth and the traditional small and hand industries essentialto employment and social stability.

4. She will increase living standards, per capita income, consumption, investment, saving and national income.

5. She will take advantage of every possible way of growth consistent with democracy to develop the nation and its people. She has chosen a "mixed economy," using all three ways of economic development, public enterprise, private enterprise, and cooperative enterprise.

6. She will develop all groups and classes among all regions of the nation, so that there may be a growing equality of income and opportunity.

The First Plan was very modest and laid greater stress on agriculture, whereas the Second Plan was bold and ambitious. In the First Plan the ratio of public to private investment was 50:50, but in the Second Plan an increase in public sector investment brought the ratio to 61:39. In the Third Plan it is fixed at 60:40.

The Second Plan was calculated to secure rapid industrialization with the main stress on heavy industry and capital goods. Thus its underemphasis of agriculture was a weak point, for in an underdeveloped country with a rapid rate of population growth and food shortages, agriculture deserved a high priority, much higher than was assigned to it in the Second Plan. In the writer's opinion, the central problem in the planning and development of India's economy is the reconstruction of agriculture. In the First Plan the target for additional food grains production was 7.6 million tons and actual production was 11 million tons. In the Second Plan the target was 15 million tons, but actual production was only 10 million tons. The first three years of the Second Plan were characterized by food crisis, which worsened the inflationary situation. The total food grains production at the end of the Second Plan was 76 million tons; this is expected to rise to 100 million tons by the end of the Third Plan.[1] India is now importing 4.5 million tons of food grains every year.

The Planning Commission assumed a rate of population growth of about 1.8 per cent, but the rate has actually been 2.1 per cent. This is a terrific rate of increase. Since the rate of increase of employment during the Second Plan did not keep pace with the growth of the labor force, urban unemployment has increased. The writer believes that even at the end of the Third Plan, the problem of unemployment will still remain unsolved.

The Second Plan was a signal for huge deficits in the country's balance of payments. Rigidity of supply is characteristic of underdeveloped agricultural countries, like India, where supply, which is agricultural production, cannot easily

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[1]Planning Commission, Third Five Year Plan, p. 55.

be raised in response to increased incomes. Deficit financing on a large scale, unless accompanied by favorable crops, would, therefore, push up prices. Apart from this miscalculation as an internal factor, there was a miscalculation of balance of payments so that India had to pass through a serious foreign exchange crisis.

The size of the Second Plan was so large that it faced serious difficulties and it had to be reduced from Rs.4800 crores to Rs. 4600 crores. Although it planned to raise the national income by 25 per cent, the increase was only 20 per cent.

On the whole, the following main problems have prevented the successful implementation of the Second Plan: (1) lack of foreign exchange; (2) difficulty of securing foreign loans; (3) difficulty of developing internal financial resources; (4) bad monsoons and other natural calamities in the crop year 1957-58, so that there were food crises and an inflationary rise in prices; (5) scarcity of essential materials.

The Third Plan has again given agriculture the topmost priority because of the lesson of the Second Plan. The writer believes, however, that the targets fixed for agricultural production have been pitched too high without ensuring that requisite resources will be available.

The consumption goods industries should have been given greater emphasis in order to stimulate economic growth, neutralize the inflationary effects of development expenditure and sustain the confidence of the masses in the Plan.

The Third Plan, as did the Second Plan, mentions the achievement of equality in income and wealth as one of its objectives, but the writer's impression is that these inequalities have increased rather than diminished during the Second Plan. The Third Plan does not give even a faint idea of how this equality of wealth and income will be achieved in practice.

Indian economy has not yet reached the take-off stage which could prove the way to automatic growth. According to Rostow:

> The take-off is defined as the interval during which the rate of investment increases in such a way that real output per capita rises and this initial increase carries with it radical changes in production techniques and the disposition of income flows which perpetutate the new scale of investment and perpetuate thereby the rising trend in per capita output. A high proportion of the increment to real income during the take-off period is returned to productive investment.[1]

According to Rostow, a change-over from a level of stagnation to self-generating growth in an economy implies that it has reached the take-off stage. India's take-off date is about 1952; now she is in the midst of the take-off process.[2] India's investment, national income, foreign capital, population pressure on the food supply, and agricultural population show that she is in the first stage of a potential take-off.

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[1]W. W. Rostow, The Process of Economic Growth (2nd ed.; London, 1960), pp. 274-275.

[2]*Ibid.*, pp. 282-283.

"Indian effort may well be remembered in economic history as the first take-off defined ex-ante in national product term."[1]

The targets for the Third Plan, as presently envisaged, will take the economy a considerable distance towards the stage of self-sustaining growth and prepare the ground for more rapid development under the Fourth Plan. In view of the large investments already made, it is essential to ensure that assets created are now utilized to the greatest possible advantage. The process of development itself will offer fresh possibilities for increasing output and employment and an effort must be made to take advantage of these possibilities by ensuring the fullest possible utilization of manpower and utilization of the saving of the community. The natural resources of India are exceptionally favorable for the highest degree of prosperity through combined agricultural and industrial development.

The task of accelerating India's economic development requires a thorough understanding of both India's modern industry itself and the relationship of this industry to the rest of the economy. Lessons from abroad may be particularly useful in training industrial management and business leadership. The tools of modern research need to be turned to the study of India's industrial experience. India may have an abundant labor supply and great need for additional capital for investment. India's large-scale entrepreneurs seem to

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[1]Ibid., p. 291.

choose methods of production and to conduct their business activities more or less as do their Western brethren.

Planning is not a success in itself; it is not an end in itself. It is only a means to an end. At its end, even if all its goals and hopes are won, India will not have come to the end of her journey. There is no end of a journey when a nation is marching.

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